ABSTRACT

A gray iron alloy having a composition comprising about 4.10% to about 4.25% carbon equivalent, about 3.5% to about 3.65% carbon, about 0.4% to about 0.9% manganese, about 1.5% to about 1.9% silicon, less than about 0.12% phosphorous, less than about 0.17% sulfur, about 0.6% to about 0.8% molybdenum and about 0.3% to about 0.6% copper, and where said carbon is predominantly present as free carbon having a Type A flake graphite microstructure. The alloy is particularly useful in the manufacture of brake drums and other articles requiring a combination of high tensile strength and good thermal conductivity.